

Spectrum of Causative Pathogens and Resistance Rates to Antibacterial Agents in Bacterial Prostatitis

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Abstract : Objective: To evaluate spectrum and resistance rates to antibacterial agents in causative pathogens of bacterial prostatitis in patients from Southern Europe, the Middle East, and Africa. Materials: 1027 isolates from cultures of urine or expressed prostatic secretion, post-massage urine or seminal fluid, or urethral samples were considered. Results: Escherichia coli (32%) and Enterococcus spp. (21%) were the most common isolates. Other Gram-negative, Gram-positive, and atypical pathogens accounted for 22%, 20%, and 5%, respectively. Resistance was <15% for piperacillin/tazobactam and carbapenems (both Gram-negative and -positive pathogens); <5% for glycopeptides against Gram-positive; 7%, 14%, and 20% for aminoglycosides, fosfomycin, and macrolides against Gram-negative pathogens, respectively; 10% for amoxicillin/clavulanate against Gram-positive pathogens; <20% for cephalosporins and fluoroquinolones against to Gram-negative pathogens (higher against Gram-positive pathogens); none for macrolides against atypical pathogens, but 20% and 27% for fluoroquinolones and tetracyclines. In West Africa, the resistance rates were generally higher, although the highest rates for ampicillin, cephalosporins, and fluoroquinolones were observed in the Gulf area. Lower rates were observed in Southeastern Europe. Conclusions: Resistance to antibiotics is a health problem requiring local health authorities to combat this phenomenon. Knowledge of the spectrum of pathogens and antibiotic resistance rates is crucial to assess local guidelines for the treatment of prostatitis.

Keywords : enterobacteriaceae; escherichia coli, gram-positive pathogens, antibiotic, bacterial prostatitis, resistance

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